CLAIMS

What is claimed is:

1. A method for image processing comprising:

obtaining stereo data based on input image sequences;

building a three-dimensional (3D) model using the obtained stereo data; and

tracking a monocular image sequence using the built 3D model.

2. The method of claim 1, wherein the obtaining of the stereo data includes obtaining stereo data based on input image sequences of varying facial expressions.

3. The method of claim 1, wherein the building of the 3D model includes processing the obtained stereo data using a Principal Component Analysis (PCA).

4. The method of claim 3, wherein the processed stereo data using PCA allows the 3D model to approximate a generic shape as a linear combination of shape basis vectors.

5. The method of claim 1, wherein the tracking of the monocular image sequence includes tracking of a monocular image sequence of facial deformations using the built 3D model.

6. A computing system comprising:

an input unit to obtain stereo data based on input image sequences; and

a processing unit to build a three-dimensional (3D) model using the obtained stereo data and to track a monocular image sequence using the built 3D model.

7. The computing system of claim 6, wherein the input unit is to obtain the stereo data based on input image sequences of varying facial expressions.

8. The computing system of claim 6, wherein the processor is to process the obtained stereo data using a Principal Component Analysis (PCA).

9. The computing system of claim 6, wherein the processor is to approximate a generic shape as a linear combination of shape base vectors based on the PCA processed stereo data.

10. The computing system of claim 6, wherein the processor is to track a monocular image sequence of facial deformations using the built 3D model.

11. A machine-readable medium providing instructions, which if executed by a processor, causes the processor to perform an operation comprising:

obtaining stereo data based on input image sequences;

building a three-dimensional (3D) model using the obtained stereo data; and

tracking a monocular image sequence using the built 3D model.

12. The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

obtaining stereo data based on input image sequences of varying facial expressions.

13. The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

processing the obtained stereo data using a Principal Component Analysis (PCA).

14. The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

approximating a generic shape as a linear combination of shape basis vectors based on the processed stereo data using PCA.

15. The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

tracking of a monocular image sequence of facial deformations using the built 3D model.